

# RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:	/0/790,768	
Source:	IFWO	-
Date Processed by STIC:	3/11/04 ~	

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 703-308-4212; FAX: 703-308-4221 Effective 12/13/03: TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<a href="http://www.uspto.gov/ebc/efs/downloads/documents.htm">http://www.uspto.gov/ebc/efs/downloads/documents.htm</a>, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- Hand Carry directly to (EFFECTIVE 12/01/03):
   U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two. 2011 South Clark Place, Arlington, VA 22202
- 4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 4B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/03

## Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER:
ATTN: NEW RULES CASES:	PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 5 <sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:  (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  This sequence is intentionally skipped
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing.  Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.  Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
12PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of Patentin version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13 Misuse of n/Xaa	"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



**IFWO** 

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/790,768

DATE: 03/11/2004 TIME: 07:36:47

Input Set: A:\Sequence Listing for 002877.00028.txt

Output Set: N:\CRF4\03112004\J790768.raw

```
3 <110> APPLICANT: Karas, Michael
               5 <120> TITLE OF INVENTION: Intracellular delivery of small molecules, proteins, and
nucleic acids
              7 <130> FILE REFERENCE: 002877.00028
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/790,768
              9 <141> CURRENT FILING DATE: 2004-03-03
               9 <150> PRIOR APPLICATION NUMBER: US 60/451,243
            10 <151> PRIOR FILING DATE: 2003-03-04
            12 <160> NUMBER OF SEQ ID NOS: 25
            14 <170> SOFTWARE: PatentIn version 3.1
            16 <210> SEQ ID NO: 1
            17 <211> LENGTH: 12
                                                                                                                                                               Does Not Comply
            18 <212> TYPE: PRT
                                                                                                                                                    Corrected Diskette Needed
            19 <213> ORGANISM: (Artificial Sequence
W--> 20 <220> FEATURE:
            21 <223> OTHER INFORMATION: (Artificial Sequence
W--> 22 <400> SEQUENCE: 1
            23 Arg Lys Met Leu Lys Ser Thr Arg Arg Gln Arg Arg
            26 <210> SEQ ID NO: 2
            27 <211> LENGTH: 15
            28 <212> TYPE: PRT
            29 <213> ORGANISM: Artificial Sequence) Same of the control of the
W--> 30 <220> FEATURE:
            31 <223> OTHER INFORMATION:
                                                                                 Artificial Sequence
W--> 32 <400> SEQUENCE: 2
            33 Lys Gly Gly Arg Lys Met Leu Lys Ser Thr Arg Arg Gln Arg Arg
            36 <210> SEO ID NO: 3
            37 <211> LENGTH: 6
             38 <212> TYPE: PRT
            39 <213> ORGANISM Artificial Sequence
W--> 40 <220> FEATURE:
            41 <223> OTHER INFORMATION: Artificial Sequence
W--> 42 <400> SEQUENCE: 3
            43 Lys Lys Lys Arg Lys Val
            44 1
            46 <210> SEQ ID NO: 4
            47 <211> LENGTH: 21
            48 <212> TYPE: PRT
            49 <213> ORGANISM: (Artificial Sequence
W--> 50 <220> FEATURE:
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W--> 52 <400> SEQUENCE: 4

51 <223> OTHER INFORMATION: Artificial Sequence

DATE: 03/11/2004

TIME: 07:36:47

```
Input Set: A:\Sequence Listing for 002877.00028.txt
                     Output Set: N:\CRF4\03112004\J790768.raw
     53 Lys Gly Gly Arg Lys Met Leu Lys Ser Thr Arg Arg Gln Arg Arg Lys
     54 1
     55 Lys Lys Arg Lys Val
                    20
     58 <210> SEQ ID NO: 5
     59 <211> LENGTH: 27
     60 <212> TYPE: PRT
     61 <213> ORGANISM: Artificial Sequence
W--> 62 <220> FEATURE:
     63 <223> OTHER INFORMATION Artificial Sequence
W--> 64 <400> SEQUENCE: 5
     65 Lys Gly Gly Lys Lys Arg Lys Val Arg Lys Met Leu Lys Ser Thr
                        5
     67 Arg Arg Gln Arg Arg Lys Lys Arg Lys Val
                    20
     70 <210> SEQ ID NO: 6
     71 <211> LENGTH: 14
     72 <212> TYPE: PRT
     73 <213> ORGANISM: (Artificial Sequence)
W--> 74 <220> FEATURE:
     75 <223> OTHER INFORMATION: Artificial Sequence
W--> 76 <220> FEATURE:
     77 <221> NAME/KEY: MISC FEATURE
     78 <222> LOCATION: (1)..(1)
     79 <223> OTHER INFORMATION: Biotin
W--> 80 <400> SEQUENCE: 6
     81 Gly Gly Ala Arg Pro Leu Glu His Gly Ser Asp Lys Ala Thr
     82 1
     84 <210> SEQ ID NO: 7
     85 <211> LENGTH: 14
     86 <212> TYPE: PRT
     87 <213> ORGANISM Artificial Sequence
W--> 88 <220> FEATURE:
     89 <223> OTHER INFORMATION: Artificial Sequence
W--> 90 <220> FEATURE:
     91 <221> NAME/KEY: MISC FEATURE
     92 <222> LOCATION: (1)..(1)
     93 <223> OTHER INFORMATION: Biotin
W--> 94 <400> SEQUENCE: 7
     95 Gly Gly Gly Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg
     96 1
     98 <210> SEQ ID NO: 8
     99 <211> LENGTH: 14
     100 <212> TYPE: PRT
     101 <213> ORGANISM Artificial Sequence
W--> 102 <220> FEATURE:
     103 <223> OTHER INFORMATION (Artificial Sequence
W--> 104 <220> FEATURE:
     105 <221> NAME/KEY: MISC FEATURE
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/790,768

DATE: 03/11/2004

TIME: 07:36:47

```
Input Set: A:\Sequence Listing for 002877.00028.txt
                     Output Set: N:\CRF4\03112004\J790768.raw
     106 <222> LOCATION: (14)..(14)
     107 <223> OTHER INFORMATION: Biotin
W--> 108 <400> SEQUENCE: 8
     109 Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Gly Gly Lys
     110 1
     112 <210> SEQ ID NO: 9
     113 <211> LENGTH: 14
     114 <212> TYPE: PRT
     115 <213> ORGANISM: Artificial Sequence
W--> 116 <220> FEATURE:
     117 <223> OTHER INFORMATION Artificial Sequence
W--> 118 <220> FEATURE:
     119 <221> NAME/KEY: MISC FEATURE
     120 <222> LOCATION: (1)..(1)
     121 <223> OTHER INFORMATION: Biotin
W--> 122 <400> SEQUENCE: 9
     123 Gly Gly Gly Tyr Ala Arg Ala Ala Ala Arg Gln Ala Arg Ala
     124 1
     126 <210> SEO ID NO: 10
     127 <211> LENGTH: 14
     128 <212> TYPE: PRT
     129 <213> ORGANISM: (Artificial Sequence
W--> 130 <220> FEATURE:
     131 <223> OTHER INFORMATION (Artificial Sequence
W--> 132 <220> FEATURE:
     133 <221> NAME/KEY: MISC FEATURE
     134 <222> LOCATION: (14)..(14)
     135 <223> OTHER INFORMATION: Biotin
W--> 136 <400> SEQUENCE: 10
     137 Tyr Ala Arg Ala Ala Ala Arg Gln Ala Arg Ala Gly Gly Lys
     140 <210> SEQ ID NO: 11
     141 <211> LENGTH: 15
     142 <212> TYPE: PRT
     143 <213> ORGANISM Artificial Sequence
W--> 144 <220> FEATURE:
     145 <223> OTHER INFORMATION: Artificial Sequence
W--> 146 <220> FEATURE:
     147 <221> NAME/KEY: MISC FEATURE
     148 <222> LOCATION: (15)..(15)
     149 <223> OTHER INFORMATION: Biotin
W--> 150 <400> SEQUENCE: 11
     151 Arg Arg Gln Arg Arg Thr Ser Lys Leu Met Lys Arg Gly Gly Lys
     152 1
                                              10
     154 <210> SEQ ID NO: 12
     155 <211> LENGTH: 15
     156 <212> TYPE: PRT
     157 <213> ORGANISM: Artificial Sequence
W--> 158 <220> FEATURE:
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/790,768

#### RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/790,768

DATE: 03/11/2004 TIME: 07:36:47

Input Set: A:\Sequence Listing for 002877.00028.txt
Output Set: N:\CRF4\03112004\J790768.raw

```
159 <223> OTHER INFORMATION; Artificial Sequence
W--> 160 <220> FEATURE:
     161 <221> NAME/KEY: MISC_FEATURE
     162 <222> LOCATION: (1)..(1)
     163 <223> OTHER INFORMATION: Biotin
W--> 164 <400> SEQUENCE: 12
     165 Gly Gly Gly Arg Arg Gln Arg Arg Thr Ser Lys Leu Met Lys Arg
     166 1
     168 <210> SEQ ID NO: 13
     169 <211> LENGTH: 14
     170 <212> TYPE: PRT
     171 <213> ORGANISM Artificial Sequence
W--> 172 <220> FEATURE:
     173 <223> OTHER INFORMATION Artificial Sequence
W--> 174 <220> FEATURE:
     175 <221> NAME/KEY: MISC FEATURE
     176 <222> LOCATION: (1)..(1)
     177 <223> OTHER INFORMATION: Biotin
W--> 178 <400> SEQUENCE: 13
     179 Lys Gly Gly Arg Arg Arg Gln Arg Arg Lys Lys Arg Gly Tyr
     180 1
     182 <210> SEQ ID NO: 14
     183 <211> LENGTH: 15
     184 <212> TYPE: PRT
     185 <213> ORGANISM Artificial Sequence
W--> 186 <220> FEATURE:
     187 <223> OTHER INFORMATION: Artificial Sequence
W--> 188 <220> FEATURE:
     189 <221> NAME/KEY: MISC FEATURE
     190 <222> LOCATION: (1)..(1)
     191 <223> OTHER INFORMATION: Biotin
W--> 192 <400> SEQUENCE: 14
     193 Lys Gly Gly Arg Lys Met Leu Lys Ser Thr Arg Arg Gln Arg Arg
     194 1
     196 <210> SEQ ID NO: 15
     197 <211> LENGTH: 14
     198 <212> TYPE: PRT
     199 <213> ORGANISM (Artificial Sequence
W--> 200 <220> FEATURE:
     201 <223> OTHER INFORMATION (Artificial Sequence
W--> 202 <220> FEATURE:
     203 <221> NAME/KEY: MISC FEATURE
     204 <222> LOCATION: (1)..(1)
     205 <223> OTHER INFORMATION: Biotin
W--> 206 <400> SEQUENCE: 15
     207 Gly Gly Gly Arg Arg Arg Gln Arg Arg Lys Lys Arg Gly Tyr
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210 <210> SEQ ID NO: 16 211 <211> LENGTH: 15

DATE: 03/11/2004

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PATENT APPLICATION: US/10/790,768
                                                               TIME: 07:36:47
                      Input Set: A:\Sequence Listing for 002877.00028.txt
                     Output Set: N:\CRF4\03112004\J790768.raw
     212 <212> TYPE: PRT
     213 <213> ORGANISM (Artificial Sequence
W--> 214 <220> FEATURE:
     215 <223> OTHER INFORMATION
                                   Artificial Sequence
W--> 216 <220> FEATURE:
     217 <221> NAME/KEY: MISC FEATURE
     218 <222> LOCATION: (1)..(1)
     219 <223> OTHER INFORMATION: Biotin
W--> 220 <400> SEQUENCE: 16
     221 Gly Gly Gly Arg Lys Met Leu Lys Ser Thr Arg Arg Gln Arg Arg
     222 1
                                               10
     224 <210> SEQ ID NO: 17
     225 <211> LENGTH: 15
     226 <212> TYPE: PRT
     227 <213> ORGANISM (Artificial Sequence
W--> 228 <220> FEATURE:
     229 <223> OTHER INFORMATION: Artificial Sequence
W--> 230 <220> FEATURE:
     231 <221> NAME/KEY: MISC FEATURE
     232 <222> LOCATION: (1)..(1)
     233 <223> OTHER INFORMATION: Biotin
W--> 234 <400> SEQUENCE: 17
     235 Lys Gly Gly Arg Arg Gln Arg Arg Thr Ser Lys Leu Met Lys Arg
     236 1
                                              10
     238 <210> SEQ ID NO: 18
     239 <211> LENGTH: 19
     240 <212> TYPE: PRT
     241 <213> ORGANISM (Artificial Sequence
W--> 242 <220> FEATURE:
     243 <223> OTHER INFORMATION (Artificial Sequence
W--> 244 <220> FEATURE:
     245 <221> NAME/KEY: MISC FEATURE
     246 <222> LOCATION: (1)..(1)
     247 <223> OTHER INFORMATION: Biotin
W--> 248 <400> SEQUENCE: 18
     249 Lys Gly Gly Lys Lys Lys Arg Lys Val Met Leu Lys Ser Thr Arg Arg
                                               10
                                                                    15
     250 1
     252 Gln Arg Arg
     255 <210> SEQ ID NO: 19
                                                       The types of errors shown exist throughout
     256 <211> LENGTH: 21
                                                       the Sequence Listing. Please check subsequent
     257 <212> TYPE: PRT
                                                       sequences for similar errors.
     258 <213> ORGANISM Artificial Sequence
W--> 259 <220> FEATURE:
     260 <223> OTHER INFORMATION (Artificial Sequence
W--> 261 <220> FEATURE:
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RAW SEQUENCE LISTING

W--> 265 <400> SEQUENCE: 19

262 <221> NAME/KEY: MISC\_FEATURE 263 <222> LOCATION: (1)..(1)

264 <223> OTHER INFORMATION: Biotin

#### VERIFICATION SUMMARY

DATE: 03/11/2004 PATENT APPLICATION: US/10/790,768 TIME: 07:36:48

Input Set: A:\Sequence Listing for 002877.00028.txt

Output Set: N:\CRF4\03112004\J790768.raw

```
L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:20 M:283 W: Missing Blank Line separator, <220> field identifier
L:22 M:283 W: Missing Blank Line separator, <400> field identifier
L:30 M:283 W: Missing Blank Line separator, <220> field identifier
L:32 M:283 W: Missing Blank Line separator, <400> field identifier
L:40 M:283 W: Missing Blank Line separator, <220> field identifier
L:42 M:283 W: Missing Blank Line separator, <400> field identifier
L:50 M:283 W: Missing Blank Line separator, <220> field identifier L:52 M:283 W: Missing Blank Line separator, <400> field identifier
L:62 M:283 W: Missing Blank Line separator, <220> field identifier
L:64 M:283 W: Missing Blank Line separator, <400> field identifier
L:74 M:283 W: Missing Blank Line separator, <220> field identifier
L:76 M:283 W: Missing Blank Line separator, <220> field identifier
L:80 M:283 W: Missing Blank Line separator, <400> field identifier
L:88 M:283 W: Missing Blank Line separator, <220> field identifier
L:90 M:283 W: Missing Blank Line separator, <220> field identifier L:94 M:283 W: Missing Blank Line separator, <400> field identifier
L:102 M:283 W: Missing Blank Line separator, <220> field identifier
L:104 M:283 W: Missing Blank Line separator, <220> field identifier
L:108 M:283 W: Missing Blank Line separator, <400> field identifier
L:116 M:283 W: Missing Blank Line separator, <220> field identifier
L:118 M:283 W: Missing Blank Line separator, <220> field identifier
L:122 M:283 W: Missing Blank Line separator, <400> field identifier
L:130 M:283 W: Missing Blank Line separator, <220> field identifier
L:132 M:283 W: Missing Blank Line separator, <220> field identifier L:136 M:283 W: Missing Blank Line separator, <400> field identifier
L:144 M:283 W: Missing Blank Line separator, <220> field identifier
L:146 M:283 W: Missing Blank Line separator, <220> field identifier
L:150 M:283 W: Missing Blank Line separator, <400> field identifier
L:158 M:283 W: Missing Blank Line separator, <220> field identifier
L:160 M:283 W: Missing Blank Line separator, <220> field identifier
L:164 M:283 W: Missing Blank Line separator, <400> field identifier
L:172 M:283 W: Missing Blank Line separator, <220> field identifier
L:174 M:283 W: Missing Blank Line separator, <220> field identifier L:178 M:283 W: Missing Blank Line separator, <400> field identifier
L:186 M:283 W: Missing Blank Line separator, <220> field identifier
L:188 M:283 W: Missing Blank Line separator, <220> field identifier
L:192 M:283 W: Missing Blank Line separator, <400> field identifier
L:200 M:283 W: Missing Blank Line separator, <220> field identifier
L:202 M:283 W: Missing Blank Line separator, <220> field identifier
L:206 M:283 W: Missing Blank Line separator, <400> field identifier L:214 M:283 W: Missing Blank Line separator, <220> field identifier L:216 M:283 W: Missing Blank Line separator, <220> field identifier
L:220 M:283 W: Missing Blank Line separator, <400> field identifier
L:228 M:283 W: Missing Blank Line separator, <220> field identifier
L:230 M:283 W: Missing Blank Line separator, <220> field identifier
L:234 M:283 W: Missing Blank Line separator, <400> field identifier
```

### VERIFICATION SUMMARY

DATE: 03/11/2004 PATENT APPLICATION: US/10/790,768

TIME: 07:36:48

. Input Set : A:\Sequence Listing for 002877.00028.txt

Output Set: N:\CRF4\03112004\J790768.raw

L:242	M:283	W:	Missing	Blank	Line	separator,	<220>	field	identifier
L:244	M:283	W:	Missing	Blank	Line	separator,	<220>	field	identifier
L:248	M:283	W:	Missing	Blank	Line	separator,	<400>	field	identifier
L:259	M:283	W:	Missing	Blank	Line	separator,	<220>	field	identifier